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教授

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教育背景

2007/03—2011/01东南大学 能源与环境学院热能与动力工程系 博士

2001/09—2004/05安徽工业大学 冶金与资源学院冶金工程系 硕士

1996/09—2000/07安徽工业大学 冶金与资源学院热能与动力工程系 学士

研究方向

生物质/固废资源化利用和多污染物协同控制技术

科研项目

1. 2021年 安徽省自然科学基金面上项目“基于酸洗污泥深度还原的蒸汽-铁法制氢机理及重金属稳定性研究”（No. 2108085ME161）

2. 2019年 安徽省高校自然科学基金项目“基于核壳型Ca-Fe基的高炉煤气Ca-L耦合CLC工艺碳捕捉研究”（NO. KJ2019A0087）

教研项目

1. 2019年 燃料与燃烧学（2018mooc032） 省级质量工程项目中大规模在线开放课程（MOOC）示范项目

2. 2020年 燃料及燃烧学课程思政体系的构建与实践探索（2020kcszyjxm026） 安徽省课程思政建设研究项目

3. 2020年 燃料及燃烧学 省级示范课

代表性论文专著

一作：

[1] Duan F., Jin B.S., Huang Y.J., Li B., Wu Y.M., Zhang M.Y. Results of bituminous coal gasification upon exposure to a pressurized pilot-plant circulating fluidized-bed (CFB) reactor [J]. Energy Fuels, 24(5): 3150-3158, 2010 （SCI、EI收录）

- [2] Duan F., Wan H.P., Han Y.L., Chyang C.S., Chen H.J., Tso J. Characteristics of fluidized bed combustion with intermittent feeding using woodblocks and rubber. 2. pollutant emissions [J] *Energy Fuels*, 26(9): 5577–5582, 2012 (SCI、EI收录)
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- [4] Duan F., Liu J., Chyang C.S., Hu C.S., Tso J. Combustion behavior and pollutant emission characteristics of refuse derived fuel (RDF) and sawdust in a vortexing fluidized bed combustor [J]. *Energy*, 57:421-426, 2013. (SCI、EI收录)
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- [10] Duan F., Chyang C.S., Wang Y.J., Tso J. Effect of secondary gas injection on the peanut shell combustion and its pollutant emissions in a vortexing fluidized bed combustor, [J] *Bioresource Technol.*, 154: 201-208, 2014 (SCI、EI收录)
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- [12] Duan F., Chyang C.S., Tso J. Comparison of combustion behaviors and pollutant emissions using bituminous coal and corncob in a fluidized bed combustor. [J] *Asia-Pac. J. Chem. Eng.*, 9:718-725, 2014 (SCI、EI收录)
- [13] Duan F., Zhang J.P., Chyang C.S., Wang Y.J., Tso J. Combustion of crushed and palletized peanut shells in a pilot-scale fluidized-bed combustor with flue gas recirculation [J]. *Fuel Process. Technol.*, 128, 28-35, 2014 (SCI、EI收录)
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- [17] Duan F., Chen J., Zhang L.H., et al. Investigation of the vortexing effect on sawdust combustion in a fluidized bed combustor [J] *Energy Fuels*, 30 (3), 1701–1707, 2016 (SCI、EI收录)
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通讯作者:

- [1] Cong S.Q., **Duan F.**^{*}, Zhang Y.S., Liu J., Zhang J.P., Zhang L.H. SO₂ emission from municipal sewage sludge cocombustion with bituminous coal under O₂/CO₂ atmosphere versus O₂/N₂ atmosphere. [J]. *Energy Fuels*, 23, 7067-7071, 2013 (SCI、EI收录)
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- [4] Fang D.D.¹, Chen J.¹, Zhang L.H., **Duan F.**^{*}, et al. Experimental study on the shrinkage characteristics and devolatilization time of wood in a turbulent fluidized bed combustor using computed tomography [J]. *Energy*, 141:348-357, 2017 (SCI、EI收录)
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[11] Li, Jingang; Zhang, Li-Hui*; **Duan, Feng*** Effect of the dried and hydrothermal sludge combustion on calcium carbonate decomposition in a simulated regeneration reactor of Calcium-looping [J] Energy & Fuels, 2020, 34, 4745–4753 (SCI、EI收录)

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